PERSONAL PROJECT DIARY

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SLOT: 6   GROUP: 15

DATE	WORK DONE	TOTAL TIME SPENT (Hrs)
7/10/14	- List of the projects was uploaded in the CS-101 website - Decided Sudoku and Minesweeper as two possible project topics. - Dipayan and Sayandeep are interestd in Sudoku . - In the first formal meeting we decided to read individually about both of the two projects from the internet. - After the meeting, started to read about Sudoku puzzles and solving techniques in the internet. I read from Wikipedia and some other websites.	1
8/10/14	- Talked with Dipayan and Sayandeep about what I read in the websites last night. - At the evening read more about **Sudoku and Mineswipper** and prepared for the meeting at night. - In the meeting, we chose **Sudoku Auto Solver** to be our final Project choice because of its worldwide popularity. - After the meeting I visited some websites, and read about the requirements of a valid Sudoku puzzle and also the **Method of Backtracking** for its solution. - Understood that, for a computer this method of backtracking is the best way to solve a Sudoku.	2
10/10/14	- In the meeting, we discussed elaborately about different solving techniques of Sudoku. - Sayandeep came up with an idea that we should provide an option of playing the Sudoku game for the user. - The works to be done were distributed by me. - I distributed the work as follows ---- Dipayan: - Thinking the **logic to solve a given unsolved Sudoku,** Making an **algorithm or flowchart**; - Coding the functions named **getGrid** and **showGrid** (only after the algorithm of solution of the Sudoku is decided);	2

	▪ Checking the functions made by Sayandeep and me.
	▪ Maintaining the **group diary**.
	Sayandeep:
	    1) Thinking the **logic to solve a given unsolved Sudoku**, checking web contents.
	    2) Coding the functions named **locateAnEmptyPlace()** and **checkRow()** (only after the proper algorithm of solution of the Sudoku is decided),
	    3) **Checking the functions** made by Dipayan and me.
	    4) Deciding the contents and start thinking about how to write the SRS report (to be done later).
	
	• I took on the task of **learning about the different graphics** library we will use to build our user interface.	

11/10/14	• Finally decided to use **Gtk graphic toolkit** for our project. • Installed and configured the Code blocks for Gtk. • Wrote **CheckColumn(),CheckBox()** functions.	3
12/10/14	• Read and watched tutorials on the web about Gtk programs. • Created a Gtk program containing a **window and a button**. Added **menu bar** widget to the window and added menu options in that. • Some minor mistakes in the Checkbox() function was resolved after discussion with Dipayan. • Today's meeting was cancelled because Dipayan and I had a quiz on Monday.	4
13/10/14	• Discussed with Dipayan about the graphical interfaces which will be given in our project. • Created a message window linked with menu item "about" in Gtk. Designed an **entry widget**,which stores the entry in some variable.	2
14/10/14	• Created program to put labels in button and adding vertical, horizontal box widget in the window.	1
15/10/14	• Created Welcome page for our project containing buttons Sudoku solver,Sudoku game,Developers. • Designed a **window containing 9x9 grid of entry widget** and linked it to Sudoku solver button.	4
16/10/14	• In the lab we checked the solveSudoku function and found that was not working properly. We could not find the error in it. • Submitted the progress report to out T.A . • Created the **get_grid(),developers(),menu_about()** function And linked them to appropriate buttons.	3

17/10/14	• Created the **solve_sudoku()** function and linked it to the "Solve the Sudoku" button. • Checked our Sudoku interface for different Sudoku puzzles. • Algorithm of Sudoku generator and different difficulty levels were discussed with Dipayan and formulated. • Instructed Sayandeep to include the Sudoku generator concept in the SRS document.	2
18/10/14	• Edited some part of the code to make the **buttons colored**. • Wrote the **User Manual** for our project. • Wrote the **graphics portion of SRS document**.	2.5
19/10/14	• Team meeting was held to verify all the documents before submission.	1.5
30/10/14	• Formulated algorithm for generating Sudoku. • Coded the basic version of the generate_sudoku.	1.5
20/11/14	• Debugged the generate_sudoku function with Dipayan. • It was taking too much time to execute therefore we decided to use data files in our project . • Formulated the algorithm for our new generate_sudoku function which was going to make use of files.	2
21/11/14	• Coded the isUnique() function. • Sudoku generated by the Sudoku_game() functions were not unique Therefore we decided to use the readymade Sudoku from web and include them in our text file that was to be read by our program.	2
22/11/14	• Made the necessary changes in the check(),hint(),check1() functions and merged them with the program. • Coded the difficulty() function and merged it with our program.	2
23/11/14	• Gave some finishing touches like color of boxes and the destroying the necessary windows. • Edited the code and included the necessary comments in the program.	2
24/11/14	• Finalized all the documentation . • Uploaded the project.	1